

NEBRASKA ADMINISTRATIVE CODE

TITLE 272-NEBRASKA STATE PATROL

LAST ISSUE DATE: October 3, 1989

Chapter 6 - MANUFACTURE: BLASTING AGENTS

001 Manufacture: Blasting Agents - No special permit is issued by the Nebraska State Patrol to manufacture blasting agents in the State of Nebraska. Persons manufacturing blasting agents in the State of Nebraska shall first obtain a manufacturing permit as required by the Federal Bureau of Alcohol Tobacco and Firearms.

001.01 Buildings or other facilities used for mixing blasting agents, including mobile equipment, shall be located, with respect to inhabited buildings, passenger railroads and public highways, in accordance with the American Table of Distances. (See Appendix V.)

001.01A Minimum intra-plant separation distances between mixing units and the ammonium nitrate storage areas and blasting agent storage areas shall be determined by the prevailing standards in the trade and shall be reported to the Nebraska State Patrol in writing for approval.

001.01B When any ammonium nitrate is stored at a closer distance to the blasting agent storage than as provided in Section 001.01. A one half the mass of the ammonium nitrate shall be added to the quantity of blasting agents to calculate the total quantity involved for application of the aforementioned Table.

001.02 Buildings used for the mixing of blasting agents shall conform to the requirements of these Rules and Regulations, unless otherwise specifically approved by the Nebraska State Patrol.

001.02A Buildings shall be of noncombustible construction or sheet metal on wood studs.

001.02B The layout of the mixing building shall be such as to provide physical separation between the finished product storage, and the mixing and packaging operations.

01.02C Floors in storage areas and in the processing plant shall be of concrete. Isolated fuel storage shall be provided to avoid contact between molten oxidizer and fuel in case of fire.

001.02D The building shall be well ventilated.

001.02E Heat shall be provided exclusively from a unit outside the building.

001.03 The design of the mixer shall minimize the possibility of frictional heating, compaction, and especially, confinement. Bearings and gears shall be protected against the accumulation of oxidizer dust. All surfaces shall be accessible for cleaning. Mixing and packaging equipment shall be constructed of materials compatible with the fuel-oxidizer composition.

001.04 The formulation of blasting agents shall conform to the following requirements:

001.04A No hydrocarbon liquid fuels with a flashpoint lower than that of No. 2 fuel oil, 125 degrees F (51.7C) minimum or legal minimum as approved by the Bureau of Alcohol, Tobacco, and Firearms (ATF) shall be used.

Exception: Diesel fuels with flash points no lower than 100 degrees F (37.80C) may be used at ambient air temperatures below 45 degrees F (7.2C).

001.04B Metal dusts (aluminum powder, etc.), peroxides, chlorates, or perchlorates shall not be used unless such operations are conducted in a manner approved by the Nebraska State Patrol.

001.04C If solid fuels are used, they shall be chosen so as to minimize dust explosion hazards.

001.04D Reclaimed crankcase oil shall be permitted to be used, provided each new supply of oil is checked for compliance with 001.04A.

001.04E Unusual compositions shall not be attempted except under the supervision of competent personnel equipped to determine the overall hazards of the resulting compositions.

001.04F The requirements of 001.04A through 001.04E do not apply to

manufacturers who are licensed by the U.S. Bureau of Alcohol, Tobacco and Firearms, engaged in manufacturing blasting agents that have been tested, approved, and classified by the U.S. Department of Transportation in accordance with 49 Code of Federal Regulations.

001.05 All electrical switches, controls, motors, and lights, if located in the mixing room, shall conform to the requirements of Class II, Division 2 of the National Electrical Code, otherwise, they shall be located outside the mixing room. The frame of the mixer and all other equipment that may be used shall be electrically bonded and provided with a continuous path to the ground.

001.06 Wash down facilities shall be provided. Floors shall be constructed so as to eliminate open floor drains and piping into which molten materials could flow and be confined in case of fire. The floors and equipment of the mixing and packaging room shall be washed down frequently to prevent accumulation of oxidizers or fuels and other sensitizers. The entire mixing and packaging plant shall be washed down periodically to prevent excessive accumulation of dust.

001.07 Smoking or open flames shall not be permitted in or within 50 feet of any building or facility used for the mixing of blasting agents.

001.08 Empty oxidizer bags shall be disposed of daily in a safe manner. Not more than one day's production of blasting agents shall be permitted in or near the mixing and packaging plant or area. Larger quantities shall be stored in separate warehouses or magazines in accordance with provisions listed under Storage of Explosives.

Statutory Authority: Neb. Rev. Stat. §§28-1213 to 28-1239.

Legal Citation: Title 272, Chapter 6, Nebraska State Patrol.